UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,191	05/10/2001	Rudolf M. Bolle	YOR920010399US1	6164

7590 05/06/2004

Louis J. Percello
Intellectual Property Law Dept.
IBM Corporation
P.O. Box 218
Yorktown Heights, NY 10598

EXAMINER	
HOLMES, MICHAEL B	

ART UNIT	PAPER NUMBER
2121	3

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/853,191	BOLLE ET AL.	
	Examiner	Art Unit	
	Michael B. Holmes	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *16-21* is/are allowed.

6)☒ Claim(s) *1-3, 14-15, and 22-24* is/are rejected.

7)☒ Claim(s) *4-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

UNITED STATES PATENT AND TRADEMARK OFFICE

P.O. Box 1450, Alexandria, Virginia 22313-1450 - WWW.USPTO.GOV

Examiner's Detailed Office Action

1. This office action is responsive to application **09/853,191,** filed **May 10, 2001.**

2. **Claims 1-24** have been examined.

Information Disclosure Statement

3. Examiner acknowledges applicants' submission of prior art and information disclosure. Nevertheless, applicant is respectfully remind of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

Drawings

4. The formal drawings have been reviewed by the United States Patent & Trademark Office of Draftperson's Patent Drawings Review.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. **Claims 4-13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Interpretation

7. Office personnel are to give claims their **"broadest reasonable interpretation"** in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551(CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322(Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be

removed, as much as possible, during the administrative process."). *see* MPEP § 2106

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. **Claims 1-3, 14-15, & 22-24** is rejected under 35 U.S.C. 102(e) as being anticipated by **Li et al. (USPAP Pub No.: US 2002/0161747 A1) Filed: Mar. 13, 2001; Pub Date: Oct. 31, 2002.**

Regarding claim 1:

Li et al. teaches,

A computer system having one or more memories and one or more central processing units (CPUs), the system comprising:

one or more multimedia items, stored in the memories, each multimedia item having two or more disparate modalities, the disparate modalities being at least one or more visual modalities and one or more textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the pieces of media content for which relevance feedback is received.*") **& FIG. 2]** and

a combining process that creates a visual feature vector for each of the visual modalities and a textual feature vector for each of the textual modalities, and concatenates the visual feature vectors and the textual feature vectors into a unified feature vector. **[0019]** *In the illustrated example, a client 102 can search media content store 104 for pieces of media content 106 that match a set of search criteria. This search criteria includes both low-level features and high-*

level features. Low-level features are features that describe various low-level characteristics of the media content piece. For example, low-level features for image content may include color, texture, and shape features. High-level features are text features that are extracted from text associated with the media content piece, as discussed in more detail below. These low-level and high-level features corresponding to the media content piece 106 are compared to the set of search criteria to determine how closely the respective features match the set of search criteria. The results of these comparisons are then combined and the value resulting from the combination is used to determine how well the media content matches the set of search criteria.

Regarding claim 2:

Li et al. teaches,

A system, as in claim 1, further comprising a classifier induction process that induces a classifier from the unified feature vectors. **[0027]** *In one implementation, classifier 132 uses a set of rules to classify each of the pieces of media content as either meaningful or not meaningful. These rules are based on various information regarding the media content, such as a color histogram of an image (e.g., an image that is predominately one color is not meaningful), the size of an image (e.g., an image less than a threshold size (such as 32.times.32 pixels) is not meaningful), the type of file (e.g., an image file that is a banner is not meaningful), etc. The rules to be used can vary, and in one implementation are determined empirically.*

Regarding claim 3:

Li et al. teaches,

A system, as in claim 2, where the classifiers include any one or more of the following: a hyperplane classifier, a rule-based classifier, a Bayesian classifier, maximum likelihood classifier. **[0027]** *In one implementation, classifier 132 uses a set of rules to classify each of the pieces of media content as either meaningful or not meaningful. These rules are based on various information regarding the media content, such as a color histogram of an image (e.g., an image that is predominately one color is not meaningful), the size of an image (e.g., an image less than a threshold size (such as 32.times.32 pixels) is not meaningful), the type of file (e.g., an image file that is a banner is not meaningful), etc. The rules to be used can vary, and in one implementation are determined empirically.*

Regarding claim 14:

Li et al. teaches,

A system, as in claim 1, where the visual feature vectors represent any one or more of the following:

a color, a motion, a visual texture, an. optical flow, a semantic meaning, semantic meanings derived from one or more video streams, an edge density, a hue, an amplitude, a frequency, and a brightness. **[0019]** *In the illustrated example, a client 102 can search media content store 104 for pieces of media content 106 that match a set of search criteria. This search criteria includes both low-level features and high-level features. Low-level features are features that describe various low-level characteristics of the media content piece. For example, low-level*

features for image content may include color, texture, and shape features. High-level features are text features that are extracted from text associated with the media content piece, as discussed in more detail below. These low-level and high-level features corresponding to the media content piece 106 are compared to the set of search criteria to determine how closely the respective features match the set of search criteria. The results of these comparisons are then combined and the value resulting from the combination is used to determine how well the media content matches the set of search criteria.

Regarding claim 15:

Li et al. teaches,

A system, as in claim 1, where the textual feature vectors are derived from any one or more of the following:

close captions, open captions, captions, speech recognition applied to one or more audio input, semantic meanings derived from one or more audio streams, and global text information associated with the media item. **[0035]** *(2) Image annotation: each image can have a corresponding image annotation which is a text label describing the semantics of the image, typically input by the creator of the image file. As this image annotation is intended to describe the semantics of the image, it typically includes valuable information describing the image. Thus, each word in the image annotation is a key feature (although certain common words and/or insignificant characters/character groups may be excluded as discussed above regarding image filenames and identifiers).*

Regarding claim 22:

Li et al. teaches,

A method for segmenting multimedia streams comprising the steps o£:

storing one or more multimedia items in one or more memories of computer, each multimedia item having two or more disparate modalities, the disparate modalities being at least one or more visual modalities and one or more textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the pieces of media content for which relevance feedback is received.*")]

dividing the multimedia items into blocks of one or more key intervals, each key interval having one more frames of the multimedia items; **[0018]** *Media content store 104 represents a set of one or more sources from which media content can be received by a client 102. The storage of media content pieces 106 within media content store 104 can be arranged in any of a wide variety of manners and according to any of a wide variety of formats. For example, media content pieces 106 may be stored on multiple servers accessible using HTTP (Hypertext Transfer*

Protocol). Media content pieces 106 can be any of a wide variety of conventional media content, such as audio content, video content (for example, still images or frames of motion video), multimedia content, etc. A piece of media content refers to media content that can be rendered, such as a single visual image, an audio clip (e.g., a song or portion of a song), a multimedia clip (e.g., an audio/video program or portion of an audio/video program), etc. Although discussed primarily with reference to images, the invention can be used with a wide variety of conventional media content.

for each block, creating a visual feature vector for each of the visual modalities and a textual feature vector for each of the textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the pieces of media content for which relevance feedback is received.*) **& FIG. 2]**

for each block, concatenating the visual feature vectors and the textual feature vectors into a unified feature vector; **[0041]** *Media content indexer 136 takes the extracted features for an image from media content and features database 140 and indexes the media content piece. The*

indexing process refers to generating, as necessary, feature vectors corresponding to the media content piece and storing a correlation between the generated feature vectors and the media content piece. These generated feature vectors can be stored in database 140 or alternatively elsewhere. For low-level features, the extracted features are each a feature vector that is stored in database 140 by feature extractor 134, and thus no additional extraction or generation by indexer 136 is necessary. Alternatively, indexer 136 may combine (e.g., concatenate) the individual elements of each low-level feature vector for an image into a single low-level feature vector for the image.

categorizing each of the blocks by categorizing the respective unified feature vector; **[0047]** *Returning to act 156, if the media content piece is classified as meaningful, then low-level features are extracted from the media content piece and low-level feature vectors generated (act 162). Additionally, high-level features are extracted from the media content piece and high-level feature vectors generated (act 164). These extracted feature vectors (both low-level and high-level) are then made available for searching (act 166). A check is then made as to whether there are additional media content pieces available from the source (act 160), and processing continues at either act 150 or act 154 accordingly.* and

assembling two or more of the categorized blocks into a segment. **[0064]** *Initially, search criteria are received (act 200). The search criteria are converted to high-level and/or low-level query vectors (act 202). Assuming both high-level and low-level query vectors are created, the low-level query vector is compared to the low-level feature vectors of the media content pieces (act 204), and the high-level query vector is compared to the high-level feature vectors of the media content pieces (act 206). The results of the comparisons in acts 204 and 206 are then combined*

(act 208) and the media content pieces with the highest probability of being relevant (those most similar to the search criteria) are identified (act 210). The identified media content pieces are then rendered (act 212).

Regarding claim 23:

Li et al. teaches,

A memory storing a program, the program comprising the steps of:

storing one or more multimedia items in one or more memories of computer, each multimedia item having two or more disparate modalities, the disparate modalities being at least one or more visual modalities and one or more textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the pieces of media content for which relevance feedback is received.*") **& FIG. 2]**

dividing the multimedia items into block, of one or more key intervals, each key interval having one more frames of the multimedia items; **[0018]** *Media content store 104 represents a set of*

one or more sources from which media content can be received by a client 102. The storage of media content pieces 106 within media content store 104 can be arranged in any of a wide variety of manners and according to any of a wide variety of formats. For example, media content pieces 106 may be stored on multiple servers accessible using HTTP (Hypertext Transfer Protocol). Media content pieces 106 can be any of a wide variety of conventional media content, such as audio content, video content (for example, still images or frames of motion video), multimedia content, etc. A piece of media content refers to media content that can be rendered, such as a single visual image, an audio clip (e.g., a song or portion of a song), a multimedia clip (e.g., an audio/video program or portion of an audio/video program), etc. Although discussed primarily with reference to images, the invention can be used with a wide variety of conventional media content.

for each block, creating a visual feature vector for each of the visual modalities and a textual feature vector for each of the textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the*

pieces of media content for which relevance feedback is received.) **& FIG. 2]**

for each block, concatenating the visual feature vectors and the textual feature vectors into a unified feature vector; **[0041]** *Media content indexer 136 takes the extracted features for an image from media content and features database 140 and indexes the media content piece. The indexing process refers to generating, as necessary, feature vectors corresponding to the media content piece and storing a correlation between the generated feature vectors and the media content piece. These generated feature vectors can be stored in database 140 or alternatively elsewhere. For low-level features, the extracted features are each a feature vector that is stored in database 140 by feature extractor 134, and thus no additional extraction or generation by indexer 136 is necessary. Alternatively, indexer 136 may combine (e.g., concatenate) the individual elements of each low-level feature vector for an image into a single low-level feature vector for the image.*

categorizing each of the blocks by categorizing the respective unified feature vector; **[0047]** *Returning to act 156, if the media content piece is classified as meaningful, then low-level features are extracted from the media content piece and low-level feature vectors generated (act 162). Additionally, high-level features are extracted from the media content piece and high-level feature vectors generated (act 164). These extracted feature vectors (both low-level and high-level) are then made available for searching (act 166). A check is then made as to whether there are additional media content pieces available from the source (act 160), and processing continues at either act 150 or act 154 accordingly.* and

assembling two or more of the categorized blocks into a segment. **[0064]** *Initially, search criteria are received (act 200). The search criteria are converted to high-level and/or low-level query*

vectors (act 202). Assuming both high-level and low-level query vectors are created, the low-level query vector is compared to the low-level feature vectors of the media content pieces (act 204), and the high-level query vector is compared to the high-level feature vectors of the media content pieces (act 206). The results of the comparisons in acts 204 and 206 are then combined (act 208) and the media content pieces with the highest probability of being relevant (those most similar to the search criteria) are identified (act 210). The identified media content pieces are then rendered (act 212).

Regarding claim 24:

Li et al. teaches,

A system for segmenting multimedia streams comprising:

means for storing one or more multimedia items in one or more memories of computer, each multimedia item having two or more disparate modalities, the disparate modalities being at least one or more visual modalities and one or more textual modalities; **[Abstract]** "*Text features corresponding to pieces of media content (e.g., images, audio, multimedia content, etc.) are extracted from media content sources. One or more text features (e.g., one or more words) for a piece of media content are extracted from text associated with the piece of media content and text feature vectors generated therefrom and used during subsequent searching. Additional low-level feature vectors may also be extracted from the piece of media content and used during the subsequent searching. Relevance feedback can also be received from a user(s) identifying the relevance of pieces of media content rendered to the user in response to his or her search request. The relevance feedback is logged and can be used in determining how to respond to*

subsequent search requests, such as by modifying feature vectors (e.g., text feature vectors) corresponding to the pieces of media content for which relevance feedback is received.")

& FIG. 2]

means for dividing the multimedia items into blocks of one or more key intervals, each key interval having one more frames of the multimedia items; **[0018]** *Media content store 104 represents a set of one or more sources from which media content can be received by a client 102. The storage of media content pieces 106 within media content store 104 can be arranged in any of a wide variety of manners and according to any of a wide variety of formats. For example, media content pieces 106 may be stored on multiple servers accessible using HTTP (Hypertext Transfer Protocol). Media content pieces 106 can be any of a wide variety of conventional media content, such as audio content, video content (for example, still images or frames of motion video), multimedia content, etc. A piece of media content refers to media content that can be rendered, such as a single visual image, an audio clip (e.g., a song or portion of a song), a multimedia clip (e.g., an audio/video program or portion of an audio/video program), etc. Although discussed primarily with reference to images, the invention can be used with a wide variety of conventional media content.*

means for creating a visual feature vector for each of the visual modalities and a textual feature vector for each of the textual modalities, block by block; **[0041]** *Media content indexer 136 takes the extracted features for an image from media content and features database 140 and indexes the media content piece. The indexing process refers to generating, as necessary, feature vectors corresponding to the media content piece and storing a correlation between the generated feature vectors and the media content piece. These generated feature vectors can be stored in*

database 140 or alternatively elsewhere. For low-level features, the extracted features are each a feature vector that is stored in database 140 by feature extractor 134, and thus no additional extraction or generation by indexer 136 is necessary. Alternatively, indexer 136 may combine (e.g., concatenate) the individual elements of each low-level feature vector for an image into a single low-level feature vector for the image.

means for concatenating the visual feature vectors and the textual feature vectors into a unified feature vector, block by block; **[0041]** *Media content indexer 136 takes the extracted features for an image from media content and features database 140 and indexes the media content piece. The indexing process refers to generating, as necessary, feature vectors corresponding to the media content piece and storing a correlation between the generated feature vectors and the media content piece. These generated feature vectors can be stored in database 140 or alternatively elsewhere. For low-level features, the extracted features are each a feature vector that is stored in database 140 by feature extractor 134, and thus no additional extraction or generation by indexer 136 is necessary. Alternatively, indexer 136 may combine (e.g., concatenate) the individual elements of each low-level feature vector for an image into a single low-level feature vector for the image.*

means for categorizing each of the blocks by categorizing the respective unified feature vector; **[0047]** *Returning to act 156, if the media content piece is classified as meaningful, then low-level features are extracted from the media content piece and low-level feature vectors generated (act 162). Additionally, high-level features are extracted from the media content piece and high-level feature vectors generated (act 164). These extracted feature vectors (both low-level and high-level) are then made available for searching (act 166). A check is then made as to whether there*

are additional media content pieces available from the source (act 160), and processing continues at either act 150 or act 154 accordingly.

and

means for assembling two or more of the categorized blocks into a segment. **[0064]** *Initially, search criteria are received (act 200). The search criteria are converted to high-level and/or low-level query vectors (act 202). Assuming both high-level and low-level query vectors are created, the low-level query vector is compared to the low-level feature vectors of the media content pieces (act 204), and the high-level query vector is compared to the high-level feature vectors of the media content pieces (act 206). The results of the comparisons in acts 204 and 206 are then combined (act 208) and the media content pieces with the highest probability of being relevant (those most similar to the search criteria) are identified (act 210). The identified media content pieces are then rendered (act 212).*

Allowable Subject Matter

11. **Claims 16-21 are allowed.**

Conclusion

12. The prior art made of record and (listed of form **PTO-892**) not relied upon is considered pertinent to applicant's disclosure as follows. Applicant or applicant's representative is respectfully reminded that in process of patent prosecution i.e., amending of claims in response to a rejection of claims set forth by the Examiner per Title 35 U.S.C. The patentable novelty must be

clearly shown in view of the state of the art disclosed by the references cited and any objections made. Moreover, applicant or applicant's representative must clearly show how the amendments avoid or overcome such references and objections. *See* **37 CFR § 1.111(c)**.

Correspondence Information

13. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Michael B. Holmes** who may be reached via telephone at **(703) 308-6280**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft) facsimile transmission the fax is **(703) 746-7240**. If attempts to reach the examiner by telephone are unsuccessful, the **Examiner's Supervisor**, **Anthony Knight**, may be reached at **(703) 308-3179**.

Any response to this office action should be mailed too:

Director of Patents and Trademarks Washington, D.C. 20231. Hand-delivered responses should be delivered to the Receptionist, located on the fourth floor of **Crystal Park II, 2121 Crystal Drive Arlington, Virginia.**

Michael B. Holmes
Patent Examiner
Artificial Intelligence
Art Unit 2121
United States Department of Commerce
Patent & Trademark Office